

DIARY NUMBER FOUR

The Summer Collecting Trip, July & August, 1928.

By David C. Graham.

Preparation for this trip really began two or three months ago, at least. I sent Chen Gih Uen, the netter, into the Yachow district to work over the territory as much as possible. He has been to Moupin. Bottles and other things, including absorbant cotton, have had to be sent for. Oilcloths have been remended and re-oiled. A good many letters have had to be written and enquiries made.

Rumors about Civil War have been numerous and disturbing. In fact, civil war actually began. If civil war should come to Suifu I would have to remain there this summer to protect, or try to protect, mission property and the Chinese church. It is reported that the Nationalist movement or government in East China ordered the factions in Szechuan to refrain from fighting.

A little over a month ago a friend, Mr. Openshaw, went to Moupin. The netter, Chen Gih Uen, has been there. But very recently a state of war has developed between Chinese and aborigines and the bridges have been cut, and the hills fortified. Meanwhile Ningyeunfu is open and the Mission has offered to pay \$120.00 Mexican towards the expenses of the trip if I will go there. Ningyuenfu is a place that I certainly ought to cover. I therefore expect to go there.

The days before July 4th I was kept very busy finishing up my work in Suifu and getting packed for the trip. Several nights I was up till twelve or one o'clock and July third I stayed up till three-fifteen on the morning of July fourth before I went to bed.

On July fourth we started out. There are eleven loads, including the load carried on the back of a coolie having things I may need any time during the day.

had It was terribly hot. One coolie got sunstruck and had to quit and return to Suifu. Another coolie was engaged in his place. At Lin Shih Pien we visited the militia captain who controls the river above Suifu and he added a trusty man to the escort we have secured at Suifu. We reached Gao 'Tsang,² or High Town, where we remained for the night. The town is on the top of a hill, so is called high. I secured a few insects.

July 5. Travelled 100 li to Lo Chi. On the way we passed through a robber resort, which was quite peaceful today because the militia had made a raid and executed one of the robbers. We saw the dead robber being carried home, escorted by his wife and others, to be buried after the priest has performed the long ceremony of opening the way to Hades. His blood had sprinkled the roadway for at least a half mile. We saw where he was executed and there was a pool of blood and a heap of ashes of money paper that had been burnt. Killed two birds and secured a few insects. We were caught in a downpour of rain in the afternoon.

July 6. Today was a very hot day. Several of the coolies were practically fagged out. One coolie fainted away and was revived with cold water, after which he carried his load to the end of the day's journey. We crossed the river five

times. Reached Chien Way (Kien Way in most of the geographies but pronounced ChiensWay) after dark, 100 li. Killed a large crane, but did not see other birds worth shooting--excepting a white bird like a large white swallow. Secured a few insects. Changed escorts at Chien Way. Blistered one of my toes.

July 7. Today was another very hot day. Two coolies ran away rather than face the hard trip. We travelled 120 li or about 35 miles, arriving after dark. I was told that there was a band of robbers but that they disappeared instead of attacking. I do not know whether or not this is true. I climbed into a Han Dynasty burial cave near Chien Way (or Kien Way). I also went into a coal mine to see the crude way used to remove the water from the mine. Crossed rivers four times. I am very tired, it is eleven o'clock, and there is much to do yet, but I expect to move along tomorrow.

July 8. We stayed over all day. If we travelled today we would reach Yachow in four days. If we rested today we could reach Yachow in three days. I delivered an address at a union meeting of the three local churches. Fixed up the baggage so that things will be more convenient for travelling. It began to rain with thunder and lightning about dark. The crops are very badly in need of rain.

July 9. The weather man broke up or rather helped break up our program today. It rained very hard for an hour and a half after daylight. Then the head coolie failed to secure the full number of carriers, which fact was discovered just as we were about to start, and that further delayed us. Then the escort further delayed us. The road was muddy, and the result of all this is that we are here instead of in the town where we planned to spend the night. This town is Kia Kiang (pronounced Jia Jiang), 70 li from Kiating. On account of rain and wind the catch of insects is small. Secured one bird.

It seems to me that my richest catch in specimens during the past few months has been in bees, wasps, etc.

In West China brigands are apt to appear in almost any place at almost any time. For that reason it is necessary, when using the Smithsonian collecting outfit, to have escorts appointed by the government officials almost all the time. This increases expenses, but lessens the danger of losing the Smithsonian collecting outfit or the specimens collected. Today we had an escort of two soldiers all the time and six soldiers part of the time.

We passed a good number of old Chinese burial tombs today.

Tonight there is thunder, lightning, and rain.

July 10. It rained hard last night but cleared up today. This afternoon it was hot.

The crops are in a bad condition and will be poor if there are not more heavy rains

Today we secured three birds and some insects. We are making hard stages which makes it difficult to collect.

We now have an escort of ten men with rifles. The farther we go westward for the next few days the more dangerous it is to travellers because of brigands.

The elevation is very gradually getting higher. Kiating should be about 1200 feet above the ocean and here it is about 1500.

July 11. We are now a little over ten li from Yachow, which we would have reached easily if there had not been the heavy rain and the muddy roads on the first day. We will have breakfast in Yachow. Tomorrow the helpers and I will be very busy getting ready for the trip to Ningyuenfu. The Foreign Mission Society is helping me \$120.00 Mexican on the expenses of this trip because of services which I can render the Mission in Ningyuenfu. This means that I should not be financially embarrassed on this trip.

It rained several times today, and there was a rainbow about 6:30 P. M. This afternoon the river rose and became muddy, but it did not hinder us any.

We got one bird that looks different from anything we have collected, and a tree squirrel of a common variety.

The dispensing of medicine is a necessity on these trips to keep the coolies and the assistants in good condition.

We have passed over and through some beautiful territory, with streams, farms, and beautiful forests. There are places which we passed where robbers sometimes appear.

July 12. Arrived at Yachow in time for breakfast. I was met by the netter Chen Gih Uen and Pastor Lan. I am staying in one of the foreign houses belonging to our mission.

Today I met the City Postmaster and the City Magistrate and arranged for the military escort. I also arranged for the coolies for the trip.

Tomorrow I will have some boxes made for shipping specimens to Suifu. I will mail specimens to Suifu rather than leaving them here or taking them along to Ningyuenfu.

Tomorrow I will also go over all the loads to make sure they are the right weight.

There is actually a state of war in Moupin between the aborigines and the Chinese so that it is impossible to collect there. Even the bridges have been destroyed.

July 13. Packed boxes No. 121, insects, Suifu to Yachow; 122, Yachow, insects; 123 frogs from Yachow; 124 frogs from Yachow; 125 insects Yachow etc. Repacked all the boxes. Reckoned accounts with the collector, Chen Gih Uen, who has been collecting at Yachow. Mammal No. 110

July 13., (continued) Had eight boxes made. Packed five boxes of specimens which I am leaving here in Yachow with Miss Nelson, a nurse in our hospital, until my

return. Weighed and repacked all the boxes. I was given a feast by Pastor Lan, an old friend of mine, Chinese, who helped a great deal in the preparations for the trip. .

July 14. Made ninety li to Uin Gin Shien, passing over the mountain pass called Gi Tsi Gang, which is probably at least 4000 feet high. Filled the cyanide bottle to overflowing with insects. Purchased a pheasant and killed two crows.

The Chinese friends gave me a supper in our chaple at Uin Gin Shien. They urged me very hard to stay over tomorrow and lead the services, but when so much money is being invested in this trip and the time is so short, I should move right along. Our stage tomorrow is only 40 li, which leads us to a fine collecting spot, with a half a day and an evening in which to work.

At the top of the pass I saw the head of a robber who had been robbing people on that pass. When the robber was caught he was promptly beheaded.

July 15. The journey today was only forty li, but they were long li and up hill, and it was terribly hot. Got a good catch of insects. Spent the night at Huang Li Pu. It seems to me that I have what the aborigine and Ho the skinner have, malaria. It is a good thing that I came well prepared for such things. Ho and Yang Fong Song Tsang, the aborigine, are practically cured now.

Killed four birds.

There was a light thunder shower about an hour before dark.

There are woods all about this place. I was anxious to have the netter and the aborigine work this afternoon along the hillsides. The dinner meal was very late after we had been here an hour or more. While we were eating it began to thunder. I said to the aborigine Yang Fong Tsang, "You see that you could have been hunting an hour, and now it is going to rain, and you will probably not get to hunt at all." He was not half through eating, but he immediately, and without a word, left the table, picked up the shotgun, and went to the woods. As he started out of the door I asked, "Have you eaten enough?" But he did not answer. I thought he was mad at me because of my light rebuke and felt it because he has never been mad at me before. After it began to rain hard he came in with a bird. I waited until I thought his anger had time to cool, and then began to talk to him about the incident. (None of us knew it would be so long before dinner). What he said was practically this. He felt that he had done wrong in not going out before dinner. He wanted this undertaking to succeed, and thought that helping it succeed was more important than eating. He had not been mad. I told him that I was very anxious for the undertaking (expedition) to succeed, and wanted him to do the best he could, but that the Smithsonian secretaries and curators are gentlemen, and that neither they nor I wanted him to injure his health. Then I told him that such work as we are doing is to some extent a little contribution to scientific knowledge, and that not only America but China and other countries would to some little extent be benefited by such work. Our three helpers, Ho, Chen, and Yang, are really working hard and anxious to do well this summer. All four of us are walking and do not expect to do anything else until our return to Yachow.

The altitude at Uin Gin Shien is approximately 2500 feet, and here at Huang Li Pu it is approximately 3800 feet.

We secured a fairly good catch of night moths.

July 16. The journey today was a long, hard one, and through the most dangerous territory we have encountered this trip. But the air was cool, there was cool, clean, pure mountain water to drink, there was wonderful scenery to see, and there were wild strawberries, red and black raspberries, and a very large yellow berry that I liked best of all. One would just about fill your mouth, and I preferred the taste to that of the other berries, even strawberries. They grew between the altitudes 6000 to 8500 feet, and in a moist district with plenty of rainfall. I have kept some seeds and am sending them in hoping that someone in the agricultural department who is a specialist in botany will plant the seeds and enrich the tables of civilized people by domesticating this plant. It generally grows in with other wild bushes.

We crossed the most dangerous pass in this trip. This morning there was a band of robbers operating there. But this afternoon they had gone away, probably knowing that my ten soldiers were coming. The soldiers were excited and even thought they saw the robbers, but I think they were mistaken. Altitude of Da Shiang Lin Pass 9400 feet. Altitude of Chin Chi Shien 6100 feet.

We secured a fine catch of insects and nine birds.

July 17. Today was extremely hot. We travelled 80 li to Fu⁴Lin² where the barometer registers 3400 feet.

The wind blew much of the time so hard that insects kept very quiet.

This side of the Da Shiang Lin pass is naturally semi-arid in the lowest altitudes. Just now it is so dry that many of the crops are already dead. Even the leaves are dropping off the trees. Famine is certain here this winter. West of the Da Shiang Lin pass the shrubbery is more thorny than on the east side where there is a heavier rainfall.

Today I met a number of friends. Several of them have rendered a great deal of help in handling knotty problems. One is a Lolo Christian, one the Fu Lin postmaster.

July 18. A Chinese who passed us today said that on the Da Shiang Lin pass the robbers were there just before our arrival and got out of our way, but returned as soon as we had gone down the mountain, and robbed others.

Today we crossed the river in ferry boats. The Yamen officers delayed us three whole hours in doing what could have been done in ten minutes, so we have not made a full stage.

We are getting out of the semi-arid region. We are in a town called Ho²Lan² Tsan.⁴ Tomorrow we will try to make up what we lost today.

So many friends called last night that I went to bed at 1:30 A. M. I'm pretty sleepy.

Near the top of the pass I saw in a basket on a pole the head of a robber who had robbed and killed a postman. The magistrate used this method to warn others.

Used the gasoline lantern tonight and secured some good night moths. We are getting some interesting wasps and bees.

I think that a lot of the insects have died for lack of water between Chin¹ Chi¹ Shien⁴ and Fu⁴ Lin.²

July 19. Travelled 70 li, much of it uphill, to So¹ ma³ Tsang.²

We have had great success with insects last night, today, and tonight.

It rained hard last night, and we had a heavy shower this morning.

We are in a country now where there is plenty of rainfall, and myriads of flies. We are spending the night at So Ma Tsang where the altitude is 8200 feet.

July 20. This morning it rained hard just before daylight, and we had a hard time waking up the coolies. We went 70 li to Liao⁴ E¹ Pin² which is about 6800 in altitude. We secured three small birds and many insects.

A Chinese overtook us and informed us that the robbers on the Da Shiang Lin pass got out of sight when we arrived but came back at once and robbed other travellers.

Today we crossed a mountain pass 8500 feet in altitude.

We are in a country of Lolos who call themselves No-So, and also of Shi¹ Fan¹ tribes. There is really plenty of danger of being robbed by tribes people, but I am taking every precaution.

My working hours are from about 5 A. M. to from 10:30 to 1:30 at night. I get pretty sleepy sometimes.

At the top of the Da Shiang Lin pass there is wonderful scenery westward, but I was so interested in what the robbers and the soldier escort might do that I forgot all about looking at the scenery.

July 21. We are now in a territory where the Lolos are very much feared. They may appear and rob and kill at any time. Yesterday a woman told me she had been a captive among the Lolos for two years. Today a Chinese woman, evidently in much mental distress, knocked her head on the ground and told me that three of her children were captives among the Lolos (or Nosos). She had no money to ransom them. Just as I wrote this sentence this village became excited. The Lolos have come just outside this village and have shot 10 odd shots. The soldiers have prepared to fight them and drive them away. This is real business, dead in earnest. Today I

have had an escort of fifteen soldiers. They, the Lolos, take people off into their country and keep them for life as slaves or hold them for a heavy ransom. Let us hope my escort can drive them away. I will have to have an escort of 35 soldiers over a high (Shiao³ Shiang⁴ Liu² Pass) mountain. This will partially explain why much of the expense on this trip will have to be spent on escorts. It is probably no worse this year than it will be in the future, so it is well to cover Ningyuenfu by collecting this summer. A big battle will ensue near here in a few days between Chinese and the aborigines. (Later--the difficulties were talked out and settled without a battle).

Today we secured 7 birds, two of which are of a variety I have not secured before.

We are again in a territory where the crops are drying up and dieing for lack of rain. Famine will surely show its teeth in this section this winter.

Exchange is a great problem. It varies in each city--the rate between copper cash and the "big" or real silver dollar, and another partly steel dollar used in Yunnan and in this section.

I have had a hard time getting the coolies to move along at a rapid rate. The hills are steep, the weather hot, and a load of eighty pounds is very tiresome. We expect to reach Ningyuenfu the 13th day from Yachow.

Wang

The place we are in is Nang Jia Tan. Its altitude is 6400 feet.

Today I ate a new kind of a dish made from potatoes that was extremely delicious. Potatoes uncooked are cut into slices, then ground practically to water, then this sifted through a rag. The sediment that goes to the bottom is separated from the juice by pouring off the juice. Then the sediment is dried in the sunlight and becomes a white powder. Boiling water is poured into a dish containing the powder and stirred, and sugar added. I have seldom eaten a more delicious dish. The potato must be mixed well with cold water (just a little cold water, enough to wet the powder) before the boiling water is poured in. It is like a transparent jelly.

I simply could not make this trip into Ningyuenfu if I did not have pull enough with the military officials to get an adequate escort. To keep this pull I will have to give presents, which are a necessary part of the collecting expenses.

There is some very beautiful scenery to see at certain times on this trip.

July 22. Today we passed through Yueh Shi or Ueh-Shi, or Yoh-Shi. I had to go to the postmaster to secure the Yunnan half-dollars usable in this district.

We saw more crops that are beyond reviving even if it rains.

The Lolos or Nosos are great beggars. They nearly beg your head off. They kneel and kotow to you in order to get a gift of money with which to buy liquor, of which they are very fond.

Yueh

At Yueh Shi the beggars played a cute trick. They fired off firecrackers when I started off, a way of giving a friend much face, in order to get me to give

them money. You haven't face to refuse under such circumstances. We got 7 birds today.

The skinner Ho has a bad foot. He stoically bore the pain 2 days before telling me about it. I am now doctoring it.

The pigs in this section often have long brownish hair and a long snout, probably the result of interbreeding with the wild boars. The ducks have a different color than is seen in central Szechuan.

There are many things and customs here reminding one of those in Tibet. The dogs are bigger and fiercer than the dogs in central Szechuan, probably due to intermixture with the famous Tibetan dog.

We are travelling southward. This village is called Shiao³ Soh⁵ and is 60 li from where we stayed last night and 40 li from Yueh Shi. Altitude about 6500 ft.

The escorts are necessary but they are a lot of bother. They always haggle for more tea money. The soldiers of our escort now are half-breed Lolos. They sing a good deal and their songs remind one (the tunes) of those of the American Indians. This is not true of the music of the Chuan Miao.

There are lots of fleas and bed bugs, and one of our problems is how to avoid them.

July 23. Today we crossed a high mountain called by the Chinese Shiao Shan, Little Mountain, or Shiao Shiang Lin, or Little Shiang Lin, in contrast to the high pass near Yachow called Da Shiang Lin or Great Shiang Lin, or Da Shan, Great Mountain.

The barometer indicated that the top of the pass we crossed over today is 10800 feet high, as contrasted to that of the Great Shiang Lin, 9400 feet high. The climb up the latter mountain begins at 2500 feet, while that of the Little Shiang Lin begins at about 6500 feet. The climb up the Little Shiang Lin is, therefore, about 4300 feet, and that of the Great Shiang Lin 6900 feet, so the latter seems the greater mountain to the Chinese.

The Little Shiang Lin is more feared by the Chinese, for here the Lolos appear and rob, loot, and take people captive while those on the Great Shiang Lin are Chinese robbers. The Chinese assert that the Chinese robbers act according to principles while the Lolo robbers do not.

We had an escort all the way here, but the expense was only about 1/3 what I expected it to be.

For the last few days we have seen many houses with shakes for shingles, these being held on by large stones instead of being nailed.

We have seen much buckwheat, rice, corn, and rye during the past few days.

Today we secured 3 birds. We are spending the night at Den Shiang Uin. The altitude is 8100 feet, approximately

There was a heavy wind today which made our catch of insects smaller, but we secured 3 birds and 2 snakes.

I measured a "black-boned" Lolo or Noso today. They call themselves Black-boned people and consider themselves the Elite. There are white-boned Lolos who are part Chinese. He was a darker than any Chinese or Chuan Miao I have measured.

July 24. Today we travelled 100 li to the town of Lo² Gu³, the elevation of which is about 6500 feet. We secured 4 birds. We passed through a village that had been looted, the houses burnt, and the people, Chinese, taken away as captives by the Lolos. Some of the captives have been ransomed, while others have not and are still in captivity.

We arrived here at 4:30 P. M. and just missed a very heavy rain and thunderstorm. It would have drenched us and our things.

I have 14 coolies. There are 3 collectors and skinn^{yamen}ers. I make 18. Part of the time I have had an escort of 15 soldiers and yumen (?) runners, making a total of 34 in the expedition. "Safety first" is my motto, for the Smithsonian Institution cannot afford to lose the collecting outfit, and neither the Smithsonian Institution nor I can pay a ransom of 2,000 or 3000 dollars Mexican.

⁴ ²
The military official at Den¹ Shiang Uin, where we stayed last night, is very friendly. He reports that in the woods about the town there is plenty of wild game and that he can secure the cooperation of the "black-boned" Lolos in securing game. I may go back to that town and hunt and collect a few days after we have worked at ^{Ying}Yingyuenfu. Then I want to work in the territory of the friendly Lolos near Fu Lin before returning to Suifu.

The rice grown in the highest altitudes is red instead of white. The white rice will not grow there.

^{boned}
The "black-bone" Lolos seem much darker than the Chinese. They burn their dead instead of burying them.

Many things about the Lolos and the Fan people in this section remind me of Tibet.

Not a few Chinese wear Lolo clothing made and worn or sold by the Lolos or Nosos.

The Lolos are heavy drinkers of liquor. They are very often begging money to buy it with.

The dragonflies and some of the other insects found here seem different from those in Central Szechuan.

On this trip I am eating very little foreign food. I eat Chinese rice and vegetables with my Chinese collectors, using chopsticks. I supplement this with carnation milk, cookies, and fruit canned in Szechuan. This cuts down the food-loads. I am getting along as well as I would on foreign food. I am not using

butter, but may use a tin of butter later. I am in good physical condition.

I have to stay up at night later than the Chinese helpers, and get up when they do at daylight, yet they are a little bit more tired and sleepy than I am at night.

There is much mineral this side of Yachow, especially iron. In some places there are good coal deposits.

I have seen none of the larger red ants found about Tatsienlu and Songpan in the higher altitudes.

Today a coolie with a load containing bottles slipped and fell downhill. Several bottles were broken, which will leave us short.

Tonight I visited the head military official of this district, including Ningyuen. He is probably half Chinese and half tribesman, but he is the leading man of this district. He is giving me a military escort that means adequate protection to Ningyuenfu. He says it is unwise and unsafe to hunt or collect on the mountains near Mingyuenfu, but if I will come back to where we stopped last night he can furnish adequate protection and there is plenty of game.

July 25. Today we got ten birds. Two were woodpeckers, the kind I got one specimen of near the top of Mt. Omei in 1925.

It rained hard all night last night and this morning until about 8:30. We travelled to Li Tseo, 70 li. Tomorrow we have 50 li to travel before reaching Ningyuenfu. We are travelling almost directly south.

During the past few days we have generally been in narrow valleys or gulches between steep mountains. Today the valley widened out and the mountains and hillsides are much more gradual or sloping. This looks like a geologically old valley, while the others passed through look like young valleys.

This afternoon the sun came out and dried the roads up.

The river and streams are swollen and muddy.

We can not work the high mountains around Ningyuenfu because of the Lolos. I want to cover Ningyuenfu very thoroughly in 9 or 10 days and then come back and spend about 5 days each in 2 places where it is safe and where we can work in the higher altitudes.

We are spending the night at Li Tseo, the altitude of which is about 6200 feet.

The coolies were able to ride down the river in boats for about 25 li, but with the netter and the aborigine hunter Yang Tong Tsang I walked all the way so as to collect. Secured some good insects.

We have seen almost no snakes. We have seen only 2 since the day we left Yachow and have both of them. We have seen no mammals at all excepting a black bear that the aborigines had killed. They had torn off some of its claws, or we might have purchased it.

A good many of the Chinese in this part of the country call me Da Ren or Great Man. The Chinese helpers sometimes call me Lao Ban (Old Board), which is the Chinese term for Boss in the everyday language of the people.

July 26. We are now in Ningyuenfu. The bungalow in which I am staying is in a beautiful spot overlooking the city and also the large lake that is near here. We secured three birds, two of varieties I have not secured before.

We arrived at noon, a friend, Liu Chin Lang, invited me to dinner. Then we visited the city magistrate, the postmaster, the military official, and the Catholic priests. The priests are sending moths and butterflies to France.

Tomorrow we are going to hunt and collect on the lake, where I am told there are yellow ducks. (Note. The yellow ducks apparently come here in colder weather.

July 27. Today we spent shooting on the lake. We had our dinner and our supper in a teahouse on a small island. From the teahouse there was a wonderful view. We secured 39 birds and a squirrel. Mammal 111.

We were caught in a heavy rain on the way home.

July 28. Last night no insects came to the lantern, although it was dark and rainy. Today we crossed the lake to Luh Shan, where there are many temples and trees. We felt sure that that place would be rich in birds and insects. Because of the danger from Lolos we had to secure an escort. But we got no birds and practically no insects on Luh Shan. We got several birds crossing the lake, and some on shore.

There were a good many bullet holes in the doors and walls of the temples, made by Lolos in attacks on the temples.

A number of the members of our Mission did not want me to take this trip because of its dangers, but so far nothing has happened.

Killed about 17 birds and one squirrel. Mammal No. 112.

July 29. Secured five birds and one squirrel. Mammal No. 113.

I can hardly understand the scarcity of insects here. Packed today Boxes 126-133, all insects.

Today I had a great many callers.

July 30. The rain poured down in torrents all last night and up until two o'clock this afternoon. This interfered with our collecting. Chen, the netter, was to come in today, but the bridge was washed away and the stream could not be crossed. I spent the day labelling and caring for specimens, and mailed eight boxes of specimens to Suifu. The cost is about the same as if I took them with me, and if the robbers or the Lolos get me on the way back they will not get all the specimens collected. I also arranged to get money for the return trip to Suifu.

July 31. We have been consistently playing against poor luck since reaching Ningyuenfu. There are two directions in which one must not leave the city

without a heavy escort unless he wants to be robbed or captured by the Lolos. The best place to hunt where it is safe is toward the lake or inland sea. Here the rains have made the river a roaring torrent. The bridges have been swept away and the river is impassible. The netter is on the other side of the river and cannot get into the city. He is without money and without kerosene for his lantern. We wanted to hunt in that direction today. We shall hunt in the one remaining direction which is possible. Here in the city insects simply will not come to the lantern at night, even the gasoline lantern.

Exchange is a hard problem. There are the ordinary big silver dollars. They are hard to use in this district. Here Yunnan half-dollars with some steel in them are generally used. The ratio between the Yunnan money and big dollars constantly varies. Then there are the copper coins. The ratio between them and big silver dollars or Yunnan money also varies constantly. Often payments must be made in copper coins. I have secured much more favorable exchange recently through the cooperation of friendly postal officials. Postal and military officials have been very friendly and helpful on this trip.

Well! I have long realized that a foreigner in China need not suffer from lack of a variety of interesting experiences. Here is an illustration. On Saturday we went to the mountain Luh Shan. Chen Gih Uen took some arsenic to use on any wild rats or mice he could catch during the following two nights, for he was to remain and work on Luh Shan until yesterday morning. The head coolie cooked dinner. He thought the arsenic was salt and used it in the vegetables. There are five of us, including myself, who ate that food. I have felt badly since, but did not know the reason until today. A narrow escape for all of us!! I will be entirely well by Monday when we will leave here for better hunting-grounds. I felt like vomiting after eating that food, but restrained myself. I knew something had been wrong with the food. I am fond of vegetables and ate more of them than anyone else, so I got a worse dose of the arsenic than the others. We will have to make our work more fool-proof in the future. The two dangers, beside robbers, are arsenic and the guns. Chinese are quite apt to pull the trigger of a gun not realizing what may happen.

Later. We secured 18 birds today and two rats, besides some insects. Chen Gih Uen says that the soldiers at Luh Shan tasted the arsenic thinking it was salt. Because it tasted queer they did not use it. If they had not tasted it they would have used it in their food, and then about thirty people in all would have been affected.

I was surprised today to find some white ants working on eucalyptus trees.

I was invited out to a feast this afternoon.

August 1. Labelled mammals 111-116. Packed several boxes of specimens for shipment. Secured 8 birds, one snake, and many frogs and insects. Packed eighty birds in three large boxes. Mailed box 135 at the Postoffice.

There are two mice that I have lost track of. I do not know whether I gave them a number or not. I will, therefore, skip mammal numbers 117-118, leaving them vacant for these small mice, which are probably packed.

August 2. I have already mailed sixteen boxes of specimens, and expect to mail three or four more. Today I finished securing money for the return trip, unless great luck increases expenses, in which case I can secure money at Fu Lin.

Last night it rained hard, the rain coming down in torrents. The rain continued until noon today, keeping us indoors. It cut down our catch for the day decidedly, but we got eleven birds and some insects. I spent some time packing specimens and preparing for the return trip.

I am using the same Puto or head coolie and several of the coolies that I had on the way in from Yachow.

August 3. Box 143 filled, frogs, snails, and 144 contains 33 birds and mammals, skins. Box 145 has 32 skeletons of mammals and birds. Completed filling 143, wrapped insects, and box 136, pinned flies. Secured a large green snake and a small red snake. Secured two birds of a variety I have not secured before, about the size of a robin. Finished arrangements for coolies for the return trip to Yachow.

There is a peculiar animal in this part of Szechuan and in Yunnan Province that has large scales practically all over its body. It is a great digger and is about the size of a badger. I thought of buying a skin or shell here, but a friend here promises faithfully to secure living specimens and send both shell or skin and bones which will be much better. Secured another bat today, which I put in formalin.

Today I took anthropometric measurements of a full-blooded Lolo (Moso) and of a half-breed. I hope to measure more tomorrow.

Today I also completed securing money for the return trip, sufficient to take us to Yachow unless good luck and success run up our expenses.

Aug. 5. I have mailed to Suifu to my address twenty-one boxes of specimens from Ningyuenfu. There are five boxes and some birds at Yachow.

Today I have packed for the return trip. I have simply been worn out by literally dozens of calls from Chinese friends, many of them bringing problems to consult me about. I measured two full-blooded Lolos and one half-breed.

August 6. We have made our first ^{day's} journey towards central Szechuan. We travelled 58 li to Li 'seo. It is fortunate that the stage was short. I was worn out before leaving Ningyuenfu. The many friends that came to call often brought serious problems that worry and sap one's strength.

board This morning church members came very early to say a final goodbye. There was a well-attended farewell meeting in the church yesterday, in which many flattering and complimentary things were said about me. This morning both men and women came. They expected to escort me at least out of the city gate, but the old women with their wound feet simply could not keep up, and we bade them goodbye and urged them to turn back. Three men escorted me clear outside the city and across the bridge that spans the creek, and I finally urged them to return.

One man, Mr. Lin Chin Lang, has rendered invaluable aid. He has given me the equivalent of several days' time, going to the lake and to the mountain Luh Shan, besides arranging escorts, helping me to get money at a reasonable exchange, having Lolos sent to me to be measured, etc. He says that in the future he will forward snakes and mammals to me at Suifu. He has promised to secure several specimens of the mammal that has scales, peculiar to Yunnan and this part of Szechuan. He will accept no money for his services. I will have to secure an acceptable present and send it to him from Suifu as part of the collecting expenses.

This town is quiet, and I will have a good opportunity to rest up and get plenty of sleep in preparation for a longer journey tomorrow and a still longer one day after tomorrow. Today I had fresh figs for dinner.

On the way out from Yachow we met several caravans with mules, donkeys, and horses loaded with Standard Oil kerosene going out from Yunnan to Tatsienlu.

Most of the houses in this district are made of large, clay, sundried bricks. Many of them have towers with gunholes so that the inmates can defend themselves against the raids of the Lolos.

There are more horses and mules and donkeys than are seen in central Szechuan, and fewer water-buffalo.

The Lolos, full-bloods or half-breeds, are afraid to have me measure them with the anthropometrical instruments. They are afraid it may do them harm, or even cause their death. I think that if I can get measurements enough it will prove quite interesting. It seems evident now that Lolos are both darker and taller than Chinese.

Secured four birds and some insects. One interesting insect is a very beautifully colored grasshopper,

Aug. 7. This has been a day of bad luck. We started out in the rain--it was raining hard. I lost the handle to my umbrella. We came to a swollen creek that could not be waded. The bridge was so tottery that there was danger that the coolies should fall into the creek with their loads. There was a long log near by, and seven of us, including the three collectors Ho, Chen and Yang, in the pouring rain put that log on the bridge so that the coolies could cross safely with their loads. Later a pack animal ran into the load with the kerosene and knocked it over, spilling half the kerosene. We did not see a single bird worth shooting, and did not secure any mammals. We secured a few good insects.

So far we have secured a very meagre collection of mammals. We will make every endeavor to bring the collection of mammals up to what it ought to be.

Aug. 8. Today we travelled 100 li, with a gradual up-grade. We are about 8100 feet above sea level, having climbed today about 2000 feet.

Practically (all of them but the head coolie) all my coolies are opium smokers, and it is a problem every morning to get them out of bed in time to smoke their opium and get off early.

We saw many beautiful flowers yesterday and today. One variety is a wild marigold

with a very deep and attractive color. ~~One variety is a wild marigold with a very deep and attractive color.~~

We got seven birds. We got a fair catch of insects as to numbers, and some of them are quite different from anything we have previously caught.

This district is rich in wild mammals, and we are very anxious to get them, but there has recently been war between Chinese and Lolos, which makes it less safe to hunt here. In addition, the local district ruler practically has a monopoly on the wild animals. The aborigines sell the game to him, and he makes a good profit on it. He is, therefore, very unwilling for us to shoot here, and would like us to move on quickly. However, he is going hunting with me tomorrow, and I will use every method possible to prolong our stay and to secure specimens.

Aug. 9. I was granted an escort of eight Chinese soldiers and four full-blooded Lolos and went up a stream as far as the escort would approve. We got eleven birds and some good insects, but no mammals. We therefore are going on to Fu Lin hoping to secure a good catch there. I managed to take anthropometric measurements of five Lolos who are supposed to be full-blooded.

We visited the home of a "Black-boned" Moso family. From the outside it seemed to be typical of the other Moso homes--they all looked about the same from the outside. There was no image of a god of any kind inside. The only thing visible that reminded one of Chinese religion or religion of any kind was a stick, to which feathers were pasted, that had been stuck into the wall just outside the door. This was to keep away demons that might injure the inmates. The walls were of large and small stones plastered together with clay, and were not very high. The roof was of shakes held in place by rocks placed on slats that were crosswise to the shakes. There was only one door and no window or chimney. There was a sort of a bureau, rudely made. The beds were on bamboo mats on the ground. There were several large baskets or bins in which potatoes and other things were stored. The smoke escaped through cracks in the roof and in the walls. It was so dark inside that one could hardly see without a light. There were rude partitions made of bamboo separating the house into four rooms.

Some of the Lolos wear earrings made of large red corals. Some of these earrings have also bright yellow beadlike ornaments, as large as a crabapple, which they claim are made of beeswax. They are valued very highly. The Lolos claimed that an earring with a silver hook worth about fifty cents Mexican. A few red coral beads, and a large yellow beeswax bead was worth about forty-two dollars Mexican.

Aug. 10. A.M. I do not believe that generally success is determined merely by luck, but this summer we have been playing almost continually against hard luck. Last night the rain simply poured all night, and this morning the rain is still pouring. This means that the road is impassable above us, where the stream must be crossed in several places and where there are no bridges. The traps were set last night, but no mammals were caught. Practically the only thing we can do today is to rest and to dry our insects over a fire where the smoke is quite apt to get into one's eyes. It has turned pretty cold. Yang Fong Tsang caught cold yesterday and is still under the weather. Here it is impossible to secure mammals, and the hunters do not bring any in. I hope for and expect better luck when we reach Fu Lin.

The rain ceased about two o'clock and this afternoon we secured seven birds and

some fine insects. I took a picture of this town and of some Lolos and measured three Lolos, one full-blood and two of mixed blood. One bird is of a variety that I have not secured before.

Between this place and Ningyuenfu there are many ruins of towers and fortresses, and nearly every town is walled. All this is or has been as a protection against the Lolos.

One of the coolies carrying our loads became ill and dropped out. He died yesterday and has already been buried.

Aug. 11. We came into this part of Szechuan during a time of draught. We are going out during a time of excessive rain. It rained all last night and was raining this morning when we got up. We could have accomplished nothing at Den Shiang Uin but we could travel, and that is accomplishing something. We crossed the Shiao Shiang Lin Pass in a heavy fog, with a drizzling rain. We got very few specimens. The streams were all swollen, and in crossing one of them a box containing the medicines, the kodak films, etc., fell into the creek. Tonight it kept several of us busy drying out the wet things. We had to wade creek after creek, and one creek was so high that we had to pay Lolos to carry us and the boxes of baggage across.

We had a heavy escort, but it cost us much less than it did to cross this pass to Ningyuenfu.

Yang Fong Tsang, the hunter, was sick and had to hire a horse to ride. Tonight the other two collectors have colds, and one of the coolies has diarrhea. I think that there is probably not a day on a trip like this when someone, either one of the coolies or one of the Chinese collectors, does not need medicines.

Today I purchased some stone pipes that are made and sold on the south side of the Shiao Shiang Lin Pass. Most of the work of shaping and polishing is done on the south side of the Da Shiang Lin Pass by soldiers--they rub the stone to be shaped against another stone on which water has been poured. I also bought four stone finger-rings.

The Lolos are terrible beggars. They kowton or knock their heads against the ground and then ask you for money.

We are in an inn tonight that would not take a prize for cleanliness. Stopped at Tsong Ba.

Aug. 12. This morning we reached Yueh Shi early. At Ningyuenfu I had only secured a military escort appointed by the military officials because the escort appointed by the magistrates had been of little use on the way in the Ningyuenfu, and because I had a "pull" with the military authorities. I had a fine escort as far as Yueh Shi this morning, the military official was still asleep, and the custom is not to wake a high official, but wait till he wakes up. This official smokes opium and does not get up until in the afternoon. I could not wait that long, so dealt with one of his subordinates. This person appointed only four soldiers to escort me, and asserted that that number was sufficient. I knew it was not, although it was not proper to tell him so. Today's journey was over one of the most dangerous sections this side of Yachow. After the military escort was appointed, I went to the office or yamen of the civil magistrate. Custom and law is that he must appoint an escort for a foreigner if it is asked. The magistrate was out of the city and I dealt with a subordinate. He was

obliging and appointed four soldiers. We are here safely, having had in all eight soldiers, a more adequate number than the military officer appointed.

We secured only three birds, but secured some fine insects. It rained last night but ceased about daylight this morning.

The reader may judge the dangers of this part of China from the Lolos from the following facts. Last night the soldiers would not permit the netter, Chen, to collect outside the city gates because the Lolos were constantly robbing just outside the town. Yesterday the Lolos burnt more than ten houses not far from Yueh Shi. Today I saw a Chinese fortress that had been captured, looted and then burnt by the Lolos, etc.

I purchased two mammal skins today. The animals were killed near Wang Jia Tsang near Yueh Shi.

We are passing through some very beautiful territory.

I am at present in fine physical condition.

Mammals No. 119--120.

August 13. We travelled from Bao Ngan to this town, the name of which is Hai Tang today. The altitude here is about 7500 feet, while that of Bao Ngan is about 8100 feet. The weather today was fine. It was cold when we started out this morning, but it got hot this afternoon, and it is again very cool tonight.

We got a fine catch of insects today.

We now have an escort of ten soldiers, provided by the military camp at Bao Ngan. The militia, acting on the instructions from the magistrate's yamen also appoints soldiers, but I have been able by argument and persuasion to keep the number down to one soldier today. They must appoint soldiers, but we do not need them since we already have ten soldiers with guns. By cutting the escort provided by the civil magistrate down to one man we save considerable money.

Aug. 14. We travelled today from Hai Tang to Pin⁴ E⁴ Pu, eighty li. The road led over a couple of hills, then there was a long, gradual down-grade. Most of the way there were black berries within reach, and sometimes pure mountain water, and the scenery was beautiful, with flower-covered meadows, steep limestone cliffs, and the rushing, roaring mountain stream.

We secured a few birds and some interesting insects. Most of the day there was a wind that made it harder to secure insects.

I have an infection on my right hand that has worried me some, but it is better tonight. I occasionally soaked my hand in hot water.

The altitude here at Pin E Pu is 6000 feet.

I have sent Chen Gin Uen, the netter, ahead to let our Lolo friends know that we are to arrive at Pu Lin tomorrow. They are to come to meet us.

I have so far walked every step of the way from Yachow to Ningyuenfu and returning, and hope to keep this up until I reach Yachow.

Aug. 15. We are now again in Fu Lin, after a day's journey of eighty li. We got a total of 14 birds. Thirteen are of a variety we have not secured before. During the day we had to ascend and descend a high hill, but the weather was excellent for travelling. It was cool, the sky was cloudy, but there was no rain.

We hear that the robbers are more active on the Da Shiang Lin pass than when we crossed it before.

It is necessary for me to see three men. One is General Yang, who, we hope, will provide an adequate escort across the Da Shiang Lin Pass. He is in the country and will not return for a day or two. Another is the local Deacon of the church. He is visiting friends in the country. A third is the postmaster who was away from home when I called. I expect to see him tonight.

During the next few days we expect to be in the neighborhood of friendly Lolos collecting. Mr. Li, the Christian teacher-preacher, is the key man. If our efforts succeed it will be largely because of his help. He should arrive tomorrow morning, for Chen Gih Uen, the netter, went to his home today to report that we have arrived.

It has rained hard in this district since we passed through. The grass on the hillsides is growing so that the hills and mountains are green instead of the color of baked red clay. The crops not already dead have revived.

We crossed the river in two boats, in which we rode about ten li.

On the way here from Den Shiang Uin I had a quite varied diet. I ate tsamba sweetened with honey, jelly made of potato powder and sweetened, very delicious, corn and buckwheat biscuit, etc. I eat Chinese rice every day.

I am held up here until Mr. Li, the Lolo, comes in, but I suspect that he will come in quickly.

Aug. 16. I ^{slept} slept very late this morning, sleeping until five minutes to seven. Ordinarily we get up between five and five-thirty and get to bed at ten-thirty or later up to twelve-thirty. Last night I got to bed at twelve. There is always a good deal of work caring for insects and other specimens.

Aug. 16. I have spent most of the day repacking so as to have on hand just what is needed during the next few days. We expect to leave tomorrow for the home of Mr. Li, the friendly Lolo. We have to go over a path on the side of a cliff that is quite narrow. If one slips and falls he goes into the river.

We have so far had very poor success securing mammals. I think it is not our fault, but during the next few days we are going to make a desperate attempt to bring the catch of mammals up to normal, also adding to the other kinds of specimens secured.

P. M. The local deacon Tsen has returned from his trip, and has instructions to help me secure money for this collecting trip. The evangelist Tsang from Han Yang Kai is to arrive tomorrow or next day, and he will also assist. Mr. Tsang will go out to the Lolo district where we are to collect. These things make our prospects

seem brighter.

The local General Yang has called on me this afternoon, and he gave me a leg of bacon. He did covet the Newton high-power rifle, but of course he did not get it. He is quite friendly.

Aug. 17. We had a very hard time getting the coolies started this morning, but got started at last. We are now in the home of a friendly and very likeable Lolo or rather Moso, Mr. Li. He is doing everything possible to help me secure specimens. We are staying in his home, the elevation of which is three thousand feet.

The road today led over and along the side of a precipice that the Chinese and Lolos call Ngeh Ngai or wicked cliff. This is because the road along this cliff is really a dangerous one. At one place falling or rolling rocks are apt to strike one as he crosses. The road or rather path is less than a foot wide, and on a bed of shifting sand, gravel, and small stones. Here if one should fall he would slide and fall into the river over a hundred feet below. When rocks roll down a cloud of dust rises that reminds me of the infernal regions. I took a picture of this place and also of another very steep portion of this road. At other places the road goes along the edges or the sides of perpendicular cliffs overhanging the river.

I have succeeded in purchasing for the Smithsonian Institution two old Lolo armors that may be two hundred years old, the price being about \$20.00 Mexican. I have also purchased a decorated wooden bowl and two decorated wooden spoons. The Lolo armors are rare and very hard to secure.

We set a number of traps tonight, and will set more tomorrow. Tomorrow I will climb up a high mountain and probably stay in Lolo homes a couple of days.

We are entirely in the hands of the Lolos, and will be for the next few days, but we are probably as safe as we can be anywhere in West China. There are other Lolo groups of which just the opposite would be true.

The Lolos have a script of their own. It is used by Lolo priests in writing their sacred books. I saw a sample today.

Aug. 18. Chen Gih Uen and Yang Fong Tsang went on a two days' excursion up one high mountain, and with Mr. Li and two hunting dogs I went up another. There was a climb of at least 6000 feet making a total of at least 9000 feet. When we finally reached the top, what was my surprise to find Nashan directly to the south-east, and in plain sight. *Nashan*

We set the traps. Wild boar came near the traps but did not step into them.

We first went to a Chinese hut owned by a Chinese who rents the ground from Mr. Li, the educated Christian Lolo. Mr. Li is a head man in his district and has inherited much property. This hut was made of small bamboo sticks and covered by these and by reeds. The door came only to my waist. There was no place where we could possibly sleep. We were offered a bamboo matting as a covering, but it would leak like a sieve in case of rain.

We went to another hut. It was divided into two rooms by a transparent wall made of small bamboo twigs. This wall did not go to the roof. One room was used

entirely by cattle. In the other, men slept. There was a fireplace which was a hole in the ground, but no chimney or chairs or stools or stove. We made our bed on the floor on a matting of dried ferns. The Lolo, Mr. Li, slept with me. The other men slept on straw near the fire.

There was a hard wind practically all the time, so that no insects came to the lantern.

We cooked our meals in the first hut described above. The water was from a spring that was a sort of a puddle, and it was not boiled for drinking. I saw the mother chew up cooked rice and put it with her fingers into the mouth of a two-months old baby (I enquired several times and they all affirmed that the baby was only two months old). To cap the climax, she spit the chewed-up rice directly into the mouth of the baby. The poor ignorant mother knew practically nothing about cleanliness.

Aug. 19. The green beans were not cooked done this morning. About noon I felt sick at the stomach and determined that I had better clear out of that situation. Our food included no bread nor meat, only rice, salt, potatoes, and green beans. Without eating dinner I called coolies and came down to the home of Mr. Li where my cook can prepare good food for me. This morning, with two Chinese hunting dogs and some hunters, we scoured the nearby woods.

I killed a large snake with the Newton high-power rifle. It would have escaped if I had not shot it, for it is a rapid runner. I had to cut it into three pieces and put it into three different bottles.

Aug. 20. The locality we are working in now is thirty li down the Fong River or the Da Du Ho from Fu Lin. The local name for this place is Tsao Heo Miao. The altitude is about three thousand feet.

This locality is not an ideal collecting spot. The lower altitudes are semi-arid, and the vegetation such that no insects, birds, or animals like to eat it. In addition, this is a famine year for this locality. Already some people are eating wild berries, herbs, and grasses along with such other food as they can get.

This morning Yang Fong Tsang took the Newton high-power rifle and went off for a two-days' hunting trip. We leave for Fu Lin day after tomorrow, and for Yachow from Fu Lin the next day.

I think that my coming down quickly off the mountain saved me a spell of sickness.

Today I secured Lolo earrings, and a Lolo mouth-harp. I went hunting but did not see a single bird or animal. We secured some good insects. I took anthropometric measurements of several full-blood Lolos.

I heard some Lolo music on a mouth or juice harp. It was low, gentle, I might say entrancing. A great foreign musician could make a reputation by translating this music for foreign use.

Aug. 21. We are all packed up to go to Fu Lin tomorrow, and on towards Yachow the next day.

I took some anthropological measurements today besides collecting and caring for specimens and packing for the trip to Fu Lin.

Our stay in Fu Lin has been much of a disappointment. Not a single mammal, only a few birds, one snake, and some insects. The one bright spot is that we have secured two sets of Lolo armor.

WARNING: The arrows are all poisoned, and if one cuts himself with one of these arrows it may cost him his life. That is, this is what the Lolos told me.

Aug. 22. Started very early, going to Fu Lin. Repacked and weighed all the boxes and was able to cut down the number of carriers to thirteen instead of fourteen.

Spent some time arranging for the escort and securing money for the return trip.

The local general, head of the Hingyuenfu district, has invited me to take breakfast with him tomorrow morning, has appointed soldiers to escort me, and is writing to the military officer in charge to escort us over the dangerous Da Shiang Lin Pass.

My friend the evangelist Tsang started from here to visit us at Tsao Hoo Miao, but when he reached the "Wicked Cliff" he turned back, returning to Fu Lin. Chinese and Lolos alike are much afraid of that cliff and of the road along its edge. In one place a slip would mean falling and sliding three hundred feet into the river, in another place nearly 200 feet. However, this place does not compare at all with the road up Washan, which is easily the most dangerous, or at least by far the most scary road I have seen in west China.

Aug. 23. General Yang, the leading military and civil officer of the district from the Da Shiang Lin Pass to Hingyuenfu and Hueilichow, invited me to an early feast today. I sent the loads ahead. General Yang sent four soldiers to escort the loads. I had Yang Fong Tsang and one coolie wait for me.

General Yang gave a very sumptuous feast, inviting the leading men of Fu Lin and the church leaders besides me. He killed a sheep for this occasion, and there were many delicacies. I took pictures of General Yang, and all the guests and of five half-breed Lolos.

It must have been eleven o'clock when I got started on my journey. After the pleasant farewells we walked as rapidly as possible. Later it became cloudy and began to thunder. Then it began to rain, and then to pour. We walked in the rain 20 li, part of the time there being a heavy downpour, arriving at Chin Chi Shian (elevation 6200 feet) after dark. The main creek soon became a roaring torrent of water filled with mud and a dark red clayey color. For a long way there was a stream of water running down the path or road, sometimes ankle deep. We had to wade numerous puddles. On such occasions the Smithsonian knee-high rubber boots are indispensable and a great comfort. I am arranging for a good escort over the Da Shiang Lin pass tomorrow.

I was treated in a very courteous and friendly way by General Yang and the other officers and dignitaries at Fu Lin, as I have been practically everywhere on this trip.

Aug. 24. Today we made the hard trip across the Da Shiang Lin Pass. Twenty-three

soldiers escorted us across the pass. Then they returned to Chin Chi Shien. For twenty li we had no escort. There was no path by which brigands could get to the main road, so we were safe. Then we were met by soldiers from the east side of the mountain who escorted us to this place Huang Li Pu. On the Tatsienlu trip we did not stop here, but went all the way to Uin Gin Shien, making two days' journey in one. At that time it was not safe to stay over night at Huang Li Pu. Most of us are tired tonight and Yang Fong Tsang is sick, so we are glad to stop here. It rained some this afternoon.

I secured a good snake and we secured a few good insects.

The soldiers have recently killed several robbers on the Ta Shiang Lin Pass, and have burnt up the robber hovels, so there was less danger today than when we went to Ningyuenfu. However, it has become more dangerous between here and Yachow. A caravan of opium was robbed today and a battle ensued. Soldiers and militia recovered most of the opium. Today I killed three birds. We could kill more birds, but there is no use killing birds of which we have secured plenty of specimens.

So far I have walked every step of the way to Ningyuenfu and back, including side trips and excursions.

A number of friendly people in this town called on me after my arrival this afternoon.

deemed Aug. 25. This morning we had a military escort for twenty li, then one was not seemed necessary until we reached Uin Gin Shien. Six soldiers and a yamen runner escorted us here. We passed a place where a foreigner, Dr. Hill, was robbed the year I went to Tatsienlu, and where yesterday nearly one hundred brigands robbed a caravan of pack animals loaded with opium and other things. The battle between soldiers and militia on one hand and the brigands on the other hand continued until about noon today. No soldiers were hurt. I do not know about the robbers.

Recently brigands robbed on the main road only a few li from Yachow. A few li from here we cross the Pass called Gi¹Tsi³Gang⁴, where robbing frequently occurs. A good escort is very important, and I have just succeeded in arranging for a good escort all the way to Yachow. With this escort I should reach Yachow without seeing any robbers.

However, I have a last card to play. I have very frequently been told that without a single soldier to escort you you can pass through any robber-ridden district between Ningyuenfu and Yachow if you have the calling card of General Yang of the Ningyuenfu district with his private seal on it. General Yang gave me one of these cards with the injunction that I must return it after reaching Suifu.

We secured some good insects today. We secured a good catch of night-moths last night.

We are in an excellent place for using the gasoline lantern to catch night-moths, but at present this is a military camp, and tonight guards are stationed in all directions to ^{prevent} present a night-attack by the robbers, who are within striking distance. The military officers would be much displeased if we used the bright lantern outside the town.

The military officer in charge called on me this afternoon. He was very friendly (the common soldiers have also been friendly) and appointed a good escort to Yachow.

Chinese coolies, soldiers, and similar classes of people are experts at cursing. It seems almost necessary sometimes. A coolie or servant may pay no attention to exhortations or instructions until the other person gets mad and curses him.

We met today several caravans of pack-animals carrying cloth, rice, etc., out to Tatsienlu. All the tea we saw today was being carried on men's backs. This tea is in packages weighing about eighteen catties each. I saw today three different coolies carrying sixteen packages of tea. The carrying-rack weighs about twenty catties. The total of these loads is 300 catties each. One catty weighs $1 \frac{1}{3}$ pounds, so that these coolies were probably carrying 400 pounds each. I took a picture of one of them.

The altitude here at Ma Lin Tsang is about 3000 feet. We passed through some beautiful country today. Green rice and cornfields, hillsides, and cliffs covered with green trees and shubbery, and creeks of blue water, with plenty of large boulders.

Aug. 26. This morning we crossed over the pass called Gi Tsi Gang and came on to Yachow. At the top of the pass and at at least one other place on the way large bands of robbers have appeared recently and attacked caravans. The band with which the military officials fought a two days' battle only retreated a little way and are still in striking distance of the road. I was given an escort of a squad of 33 soldiers with rifles, who brought us safely to Yachow.

There is no raft or boat on which to go to Kiating, so I must delay tomorrow. I will dry out the insects in the foreign stove.

I spent part of the afternoon settling with the coolies.

A great deal of cloth, salt, tea, straw sandals, rice, and oil goes out to Tatsientu and hides, wool, medicines, opium, etc., are brought out to this region.

Aug. 27. I could not secure a raft so as to get down the river today, so I dried eight boxes of insects in the kitchen stove oven, then wrapped them so they are ready to ship. I also gave materials for collecting to the netter, Chen Gih Uen, who is to work here during the next few months. I also repacked the boxes for the trip to Kiating.

The head coolie embezzled some of the money of the other coolies and skipped the country.

I packed for shipping eight boxes of insects, Nos. 146-153. The labels on the outside of some of these differ from the labels on the inside. Had much trouble securing a raft for Kiating.

Aug. 28. Started for Kiating. We were delayed because of the slowness of the escort. We passed over many roaring rapids. Our raft is about 14 feet wide and 75

feet long. It consists of 25 bamboo poles placed side by side and strapped together. The poles are about six inches in diameter and one joined to another so they will reach the full length of the raft. The front of the raft turns up like a toboggan.

On quite a few of the rapids there are great rocks and boulders over which the water roars in a threatening manner. One could get scared if he wanted to.

At Yachow the magistrate first said he would send four men with rifles to escort us, but finally sent three unarmed men. On this river the Yachow township ends, and the Hong Ya township begins in a deep gorge where there are on all sides steep cliffs covered with trees and shrubbery. There are thickets near the shore of the river. Here four men appeared, two with rifles and one with a bugle, and ordered us to stop. We were on a rapid and the boatmen said they would stop below the rapid. The men ran after us, calling for us to stop. The escort told them they were escorting a foreigner. I said "What do you want us to stop for?" In a little while the raft would turn a bend and be out of sight. The boatmen asked me, "Shall we stop?" I hesitated and did not answer. Later I said "Go on." We did and were soon out of sight. They wanted to rob us. A little later I heard four shots behind us, but I do not know who fired them or why.

This morning there was a steady, light rain and this afternoon it rained hard. We are spending the night at Tai Bu Gai.

I have already walked over 2800 li this summer, a distance of over 800 miles. I'll add to this at Kiating. We have still 740 li or about 210 miles to travel by boat to Suifu, counting today's trip from Yachow.

The men who tried to stop us were apparently a part of a large robber band, the main part of which was in a village on the main road on top of the hill or mountain. They would have robbed us if we had stopped, and fired their guns so they could report that they tried hard to stop us, even firing at us, but failed. They were apparently waiting to rob a large shipment of postal goods being carried overland to Yachow on men's backs. We got through by good luck. I'll insist on a good escort with rifles tomorrow.

Aug. 29. Today we reached Kiating and are now in a mission bungalow. We escaped being robbed yesterday by sheer good luck. Today we passed three places where brigands rob and have robbed recently. We had an armed escort from Hong Ya to Kiating, so arrived safely. Robbers do not appear when you have a good escort.

I saw a flock of over twenty large wild ducks on the Ya River today. This is the earliest that I have noticed large wild ducks in central Szechuan.

Aug. 30. Today was spent in the old tombs of which there are probably thousands around Kiating. We secured artifacts that will enrich the Smithsonian collection. Among other things, there is a good specimen of a duck. We also secured thirty or forty bats, a very large kind, and small ones. We secured at least a dozen of the large bats. I became sick in the afternoon.

Aug. 31. Sent the helpers back to search new caves while I went across the river to see a cave-tomb with carvings of a chariot, a tiger, horses, a fish, the roof of a house, and men. I took pictures and drawings. In the afternoon I loaded the baggage on the boat and slept on the boat that night. I was still sick and conse-

quently weak. The helpers secured some more bats and a few more artifacts.

Sept. 1. The captain delayed a long time and so we got a late start. We pushed on to Yan Beh Sou. I could not eat, and evidently had a very high fever. I lay on the couch all day, roasting hot, but unable to sweat, and very miserable. After dark I began to sweat. I soaked all my clothing, and through one bed-tick into another, but the sweating brought relief.

Sept. 2 Reached Suifu. Had much trouble securing an escort, but was determined not to go through a certain dangerous place without one. Still very weak, but was able to walk home.

Sept. 3. With a little medical attention was slightly improved, but not a great deal. Unpacked a lot of the boxes and cared for specimens. Much work has been piled up during the past few months.

The Ningyuen trip is now closed. Beginning tomorrow I shall continue the diary in another book where it was kept up to July 4th, the beginning of this trip. The Ningyuen trip has in some ways been the hardest, most dangerous, and most disappointing trip that I have yet taken. I sincerely hope that the Smithsonian Institution will find the collection worth while.

David C. Graham.

Box No. 154 contains 63 bird skeletons

Box No. 155 27 bird skins

Box No. 156 17 Bird skins

D. C. Graham walked a total of at least 812 miles, not counting short visits and excursions in towns, during the Ningyeunfu trip.

Sept. 28. I have mailed eighty-three boxes of specimens and artifacts since returning to Suifu. There are still the Lolo armors and artifacts and some Han Dynasty tomb artifacts gathered at Kiating.

I have mailed 44 films, and have more yet to mail.

D. C. Graham.